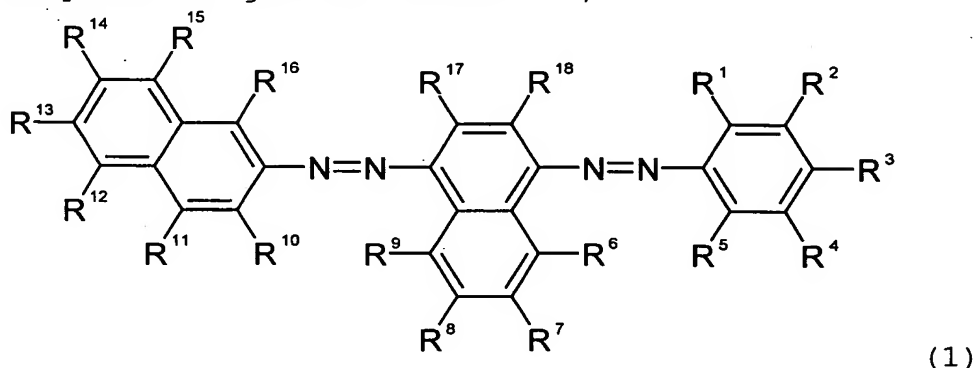


Claims

1. Aqueous, colloidal gas black suspension, characterised in that it contains at least one gas black, an azo compound of general formula 1,



wherein $R^1 - R^{18}$ may be identical or different and consist of hydrogen, hydrophilic or hydrophobic groups, acceptor or donor substituents or portions of aliphatic, aromatic or heteroaromatic, acyclic, cyclic or multiply cyclic systems with acceptor, donor, hydrophilic or hydrophobic groups, and water.

2. Aqueous, colloidal gas black suspension according to claim 1, characterised in that the gas black has a volatile matter content (950°C) of < 21 % by weight, a BET surface area of 80 to 350 m²/g, a primary particle size of 8 to 40 nm and a DBP number of 40 to 200 ml/100 g
3. Aqueous, colloidal gas black suspension according to claim 1, characterised in that the gas black content is < 30 % by weight.
4. Aqueous, colloidal gas black suspension according to claim 1, characterised in that the azo compound content of general formula 1 is < 5 % by weight.
5. Aqueous, colloidal gas black suspension according to claim 1, characterised in that the azo compound of

general formula 1 contains less than 30 % by weight contamination.

5 6. Aqueous, colloidal gas black suspension according to claim 1, characterised in that the azo compound of general formula 1 contains less than 10 % by weight salt.

10 7. Aqueous, colloidal gas black suspension according to claim 1, characterised in that the azo compound is 2-[[4-[(1-hydroxy-6-phenylamino-3-sulpho-naphthalen-2-yl)azo] -6-sulpho-naphthalen-1-yl] azo] -5-methyl-benzene-1,4-disulphonic acid, 5-[4-(4-(7-[[2-ethoxy-4-(4-methyl-2-sulpho-phenylazo)-6-sulpho-naphthalen-1-yl] azo] -8-hydroxy-3,6-disulpho-naphthalen-1-ylamino)-6-phenylsulphanyl-[1,3,5] triazin-2-ylamino) -phenylazo] -2-hydroxy-benzoic acid or tetrasodium-6-amino-4-hydroxy-3-[[7-sulphonato-4-[(4-sulphonatophenyl)azo] -1-naphth-1-yl] azo] naphthalene-2,7-disulphonate.

20 8. Aqueous, colloidal gas black suspension according to claim 7, characterised in that azo compound contains less than 30 % by weight contamination and less than 10 % by weight salt.

25 9. Aqueous, colloidal gas black suspension according to claim 7, characterised in that it contains biocides, wetting agents and/or additives.

30 10. Aqueous, colloidal gas black suspension according to claim 9, characterised in that the wetting agent is a fatty alcohol ethoxylate, polyacrylic acid or/and derivatives thereof, copolymer containing acrylic acid, acrylic acid derivatives, styrenes, styrene derivatives and/or polyethers, lignin sulphonate, alkyl benzene sulphonate, naphthalene sulphonic acid derivative, copolymer containing maleic acid anhydride

and/or maleic acid derivatives or combinations of said wetting agents.

11. Aqueous, colloidal gas black suspension according to claim 9, characterised in that the wetting agent content is between 0 and 1 % by weight.
12. Aqueous, colloidal gas black suspension according to claim 9, characterised in that the additive is an alcohol, glycol, glycol ether, heterocycle or glycerol.
13. Aqueous, colloidal gas black suspension according to claim 9, characterised in that the additive content is < 30 % by weight.
14. Aqueous, colloidal gas black suspension according to claim 1, characterised in that it may be free from wetting agent, the content of the azo compound of general formula I may be between 0.1 and 1 % by weight and the salt content of the aqueous, colloidal gas black suspension is less than 2500 ppm.
15. Process for producing the aqueous, colloidal gas black suspension according to claim 1, characterised in that the gas black and the soluble azo compound of general formula 1 are dispersed in water.
16. Process for producing the aqueous, colloidal pigment suspension according to claim 15, characterised in that the dispersion is carried out using bead mills, ultrasound equipment, high-pressure homogenisers, microfluidisers, Ultra Turrax or comparable units.
17. Use of the aqueous, colloidal gas black suspension according to claim 1 in inks, ink jet inks, paints, printing inks, latices, textiles, leather, adhesives, silicones, plastics materials, concrete and construction materials.

18. Ink, characterised in that it contains the aqueous, colloidal gas black suspension according to claim 1.
19. Ink according to claim 18, characterised in that the content of azo compound of general formula 1 is
5 between 0.01 and 0.5 % by weight.
20. Ink according to claim 18, characterised in that it is free from wetting agent, the content of the azo compound of general formula may be between 0.01 and 0.5 % by weight and the salt content of the ink is
10 less than 250 ppm.